

Oral History Program: Biographical Notes

Jack Anthony ROSE (1919-)
Acoustic Engineer

Birth and Family: Born 21 July 1919 at Forest Lodge. Has two brothers and two sisters and his father was a carpenter.

Education: Dux of Forest Lodge Primary School. Attended Fort Street High School in 1932 and attained Leaving Certificate in 1937.

Qualifications: Diploma in Electrical Engineering (1942) and Radio Engineering (1944) at Sydney Technical College.

Memberships: Australian Acoustical Society - foundation member, council chair and later Fellow; 1977-1983 International Commission on acoustics; 1980 Chair, International Congress on Acoustics

Awards:

Work History: In 1938 gained five-year traineeship with AWA (Amalgamated Wireless Australia). In this time was involved in the fundamental research of Overseas Telecommunications Commission (OTC) and air radio services.

During Second World War was involved in the development of 10kW transmitter for Navy and US Army and wrote Air Force Instruction Manual for Radio Direction Finding which became the basic document for the Jindalee project. Also at this time at age 24 was given control of factory making marine transmitters.

Married and had first daughter whilst at AWA but in 1947 left and became Chief Engineer of Transmission Products Ltd (TPL) designing radio range receivers - guidance system for beam radio to guide aircraft. Left after short period because of poor ethics of company and joined the Commonwealth Acoustics Laboratory ([CAL] later National Acoustic Laboratories - NAL) as a draughtsman and then later became an Engineer.

Jack Rose was responsible for the design of communications headset for navy aircraft carriers to improve the communications between flight deck and pilots. Became interested in hearing loss due to war induced damage and then industrial deafness.

In 1963, Rose was involved with the specification for the Sydney Opera House (SOH) Acoustics, NSW Queensland, Western Australian Government Railways in noise levels. Did first successful hearing conservation study in RAAF. Suggested for the SOH site that insulation was required on a decibel basis to eliminate noise. Met Jon Utzon at Sydney University and rejected his invitation to become acoustic consultant (not his field) after others advised Utzon his designs would not work acoustically.

Involvement with Parliamentary Select Committee on Aircraft Noise 1968 -70 over two parliamentary terms with final report and parliamentary debate highly complimentary of Rose. Wrote all technical aspects of final report and proposed more than 50 recommendations, 37

of which were accepted.

Rose was instrumental in getting International Civil Aviation Organisation (ICAO) to set up special meeting on aircraft noise (1969). He represented Australia at these meetings.

In 1974 set up noise research section in National Acoustic Laboratory. Identified need for hearing conservation in defence services and private industry and aircraft noise was becoming a major problem. First major measurements on Super Constellation. Rose took over the new noise research section virtually as a new discipline. Re wrote the instrument standards at meeting of International Electro Technical Commission (IETC).

Seconded to Qantas, Trans Australian Airlines (TAA), Ansett and R Travers Morgan Group for Second Sydney Airport Study. Consultant to Major Airports Needs of Sydney Study (MAANSS).

Lectured for about 5 years in school of Architectural Science at Sydney University with Prof. Jack Cowan. Some work for University of NSW; supervised some master's thesis.

In 1964 Rose was Chair of NSW group of the Australian Acoustical Society while Society being set up. He was nominated to ICA by Australian Academy of Science and approved by Government.

Rose initiated WESTPAC conferences; chaired International Congress, Australia in 1980 at University of NSW. With 10 Commissioners world wide, Rose was first Commissioner from Southern Hemisphere 1977-1983.

Designed Laboratory for Research into Human Hearing at Chatswood. It has been described as the best acoustic laboratory in the world.

1984 at the age of 65 retired due to age requirement then set up own consultancy mainly in acoustical security - National Crime Authority, board rooms of private companies and Costigan Royal Commission. Security for Sir John Kerr's office after he ceased to be Governor General. Did acoustics for Expos '67 (Montreal) and '71 (Osaka).

Closed consulting business about 1997. Retirement involves furniture restoration, toys for grandchildren, golf and bowls.

Prepared by Alfreda Garnsey, April 2002 from oral history interviews conducted on 26.8.99 & 2.9.99.